

VW rebar stressmeters



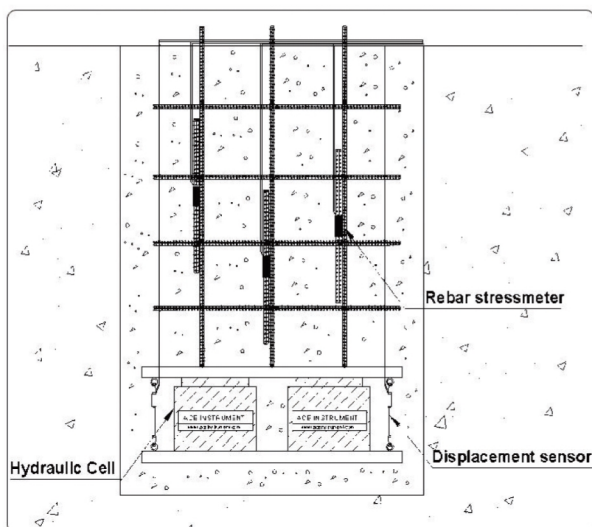
Description

VW rebar stressmeters has got the structure that reinforcing bars are attached and fixed at the both side of VW sensor. And the cross section areas of VW sensor housing and the reinforcing bar are same. Therefore it helps us to measure the exact stress being applied to the reinforcing bar.

VW rebar stressmeter outputs the force strength and the change of the stress in frequency signal. This frequency signal is transferred to VW readout unit and it is displayed in the nominated engineering unit on VW readout units. And it makes us to exactly and easily measure the data as applying the elasticity coefficient and conversion coefficient of the reinforcing bar.

And the VW rebar stressmeter will be manufactured by sister bar of the various release that according to the size of reinforcing bar.

VW rebar stressmeters are designed for waterproof. Also a temperature device for compensating for temperature variations in the transducers is equipped.



[Installation of rebar stressmeter]

Dimensions

(Unit : mm)

Model	1260	1290	1265
OD of sensor	Ø26	Ø34	Ø12.7
Overall length	1000	1000	1000
Rebar spec.	D25	D32	D13

Applications

The VW rebar stressmeters are designed and used in monitoring a stress of the reinforcing bars on a diaphragm wall or reinforced concrete structures.

Features

- Possible to measure more than the yield point of rebar
- Stability and reliability in extreme environment
- Not affected by cable length and resistance change, reproducibility and repeatability are very excellence
- Easy to use and installation
- Built-in temperature device
- Possible to automatic measurement

Produce ableness

No.	Diameter (mm)	Length of sensor
D10	Ø 9.53	1000mm
D13	Ø 12.7	
D16	Ø 15.9	
D19	Ø 19.1	
D22	Ø 22.2	
D25	Ø 25.4	
D29	Ø 28.6	
D32	Ø 31.8	
D35	Ø 34.9	
D38	Ø 38.1	
D41	Ø 41.3	
D51	Ø 50.8	

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Specification

Model	1260	1290	1265
Nominal diameter of the rebar	Ø25.4mm	Ø31.8mm	Ø12.7mm
Sensor element	Vibrating wire sensor		
Range	3,300 microstrain		3,000 microstrain
Resolution	0.5 microstrain		
Accuracy	±0.1% FSR		
Nonlinearity	±0.5% FSR		
Thermal zero shift	Less than $10.8 \times 10^{-6}/^{\circ}\text{C}$		
Operating temperature	-40~80°C		
Built-in temperature device	Thermistor (3kΩ)		
Temperature device range	-40~105°C		
Temperature device accuracy	±0.5°C		
Yield point of the rebar / elastic coefficient	4,000kg/cm ² / 2.04×10^6 kg/cm ²		
Waterproof	105m H ₂ O		
Materials	Stainless steel, high grade epoxy potting, reinforcing bar		
Weight (including rebar)	3.8kg	5.5kg	1.1kg
Signal cable	Ø4.5mm, 0.24mm ² × 4C shielded PVC sheath cable		

Rebar = Reinforcing bar

The readout

It is connected to the system such as the VW readout units, data loggers to be data logging and data acquisition system to monitor readings. It is compatible with other company's readout unit.

- ACE-800 (VW readout)
- ACE-1000 (VW data recorder)
- ACE-1100 series (VW mini logger)
- ADL-16V (VW data logger)
- ADL-200A (Smart logger)

Ordering information

- Installation area(field) and application
- Dimension of the reinforcing bar
- Keeping VW readout unit
- Cable length

Ancillary equipments

- Universal terminal box (model 7012/7024)
- Extension kit for rebar (reinforcing bar)